

REMARKS

Status of the Application

Claims 1-3 and 5-25 are pending in the application. Claims 12-25 are withdrawn from consideration pursuant to the restriction requirement dated March 17, 2009. Claims 1-3 and 5-11 have been examined.

With this Amendment, Applicant cancels claim 5 and amends claims 1 and 9. Applicant respectfully submits that the amended claims are fully supported by the disclosure. No new matter has been added.

After entry of this Amendment, claims 1-3 and 6-11 will be pending the application.

Formal Matters

Applicant thanks the Examiner for considering the references cited with the information disclosure statements filed on September 29, 2006, April 28, 2008, and September 12, 2008.

Applicant also thanks the Examiner for acknowledging the claim for priority under 35 U.S.C. § 119 and receipt of certified copies of priority documents.

Finally, Applicant thanks the Examiner for indicating that the drawings filed on September 29, 2006, are accepted.

Objections to the Specification

The Abstract has been objected to for using the phrases "further comprises" and "comprising." Applicant has supplied a new Abstract and respectfully requests that this objection be withdrawn.

Objections to the Claims

Claim 5 has been objected to for various informalities. Applicant has canceled claim 5 without prejudice or disclaimer.

Claim 9 has been objected to as allegedly lacking antecedent basis for the limitation "the objective lens." Applicant submits that amendments to claim 9 overcome this objection and respectfully requests that this objection be withdrawn.

Claim Rejections

Claims 1-3, 5, and 9-11 --- 35 U.S.C. § 103(a)

Claims 1-3, 5, and 9-11 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,310,844 to Keshner *et al.* ("Keshner") in view of U.S. Patent No. 7,132,200 to Ueda *et al.* ("Ueda"). Applicant has amended claim 1 and respectfully submits that the amended claim would not have been rendered obvious by the cited references.

Addressing claim 1, the combination of Keshner and Ueda does not disclose or suggest at least a hologram record carrier comprising "a holographic recording layer that reserves an optical interference pattern comprising components of coherent reference light and signal light as a diffractive grating therein; and a two-dimensional recording layer... wherein the two-dimensional recording layer is disposed on a side of a light irradiation face of the holographic recording layer," as recited in claim.

Keshner discloses a single-sided optical disk 100 in which a top substrate layer 102, a protective coating 104, an erasable (rewritable) data layer 106, a protective coating 108, a partially reflective coating 110, a bonding material 112, a reflective aluminum coating 115, and a polycarbonate reference layer 114 are layered in order. See Fig. 1. Keshner's disk has only one

erasable (rewritable) data layer 106 which changes transparency, for example by reversible color change of the dye, or changes reflectivity, for example by an amorphous/crystalline phase change, with the irradiation of a writing laser.

Therefore, Keshner does not disclose or suggest that the recording layer comprises two layers wherein one of the layers is a holographic recording layer that reserves an optical interference pattern comprising components of reference light and signal light as a diffractive grating therein, wherein the two-dimensional recording layer is disposed on a side of a light irradiation face of the holographic recording layer, as required by the claim. Ueda does not cure the deficiencies of Keshner.

Ueda discloses a hologram recording sheet comprising a holographic green sensitive material layer 52 and a holographic red sensitive material layer 53 each reserving individually an optical interference pattern comprising components of coherent reference light and signal light as a diffractive grating therein. See Figs. 12-13. However, Ueda is silent as to a two-dimensional recording layer as recited in claim.

Further, Keshner and Ueda are not related as a hologram record carrier where recording or reproducing of information is performed by light irradiation. Keshner is related to a digital video disc. On the other hand, Ueda is related to a hologram recording sheet suitable for multicolor displays, a holographic optical element such as a multicolor heads-up display combiner, a multicolor display hologram, a heat-wave reflecting film that is effectively used on the windows of a car or building, a broadband holographic filter, etc. In addition, Ueda does not disclose or suggest any two-dimensional recording layer that is a phase change film, a pigment film, or a magneto-optical recording film whose physical property changes in response to light irradiation.

In view of the above, claim 1 is patentable over the combination of Keshner and Ueda since the combined references fail to disclose or suggest all of the claimed features. Claims 2, 3, 5, and 9-11 are patentable at least by virtue of their dependence from claim 1.

Claim 6-8 --- 35 U.S.C. § 103(a)

Claim 6-8 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Keshner in view of Ueda, and further in view of U.S. Patent No. 5,777,760 to Hays *et al.* ("Hays"). Applicant traverses this rejection.

The combination of Keshner, Ueda, and Hays does not disclose or suggest at least the above-noted features of claim 1 incorporated into claims 6-8 by virtue of their dependence. As established above, the combination of Keshner and Ueda does not disclose or suggest at least these features. Hays does not cure the deficiencies of the Keshner-Ueda combination.

Hays discloses a hologram record carrier that includes servo blocks (relational marks) in which five spots are located around the outer periphery of a data area. See Fig. 3. Hays, however, is silent as to a two-dimensional recording layer carrying information, as required by the claims. In addition, Hays does not disclose or suggest that the servo blocks could be end marks indicating an end of a hologram, or that the servo blocks could be an address mark indicating an address of a hologram, as required by the claims.

Thus, the combined references do not disclose or suggest a hologram record carrier wherein an end mark, address mark or relational mark indicating an end of a hologram, address of a hologram, or information relating to a hologram is recorded on the holographic recording layer at a portion of the two-dimensional recording layer laminated on a portion of the holographic recording layer with the hologram group or group of holograms, as set forth in the claims.

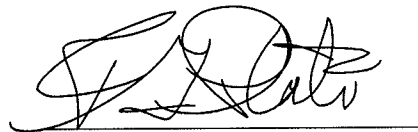
Therefore, since the combined references fail to disclose or suggest all of the claimed features, claims 6-8 are patentable over the combination of Keshner, Ueda, and Hays.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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CUSTOMER NUMBER

Date: August 20, 2009